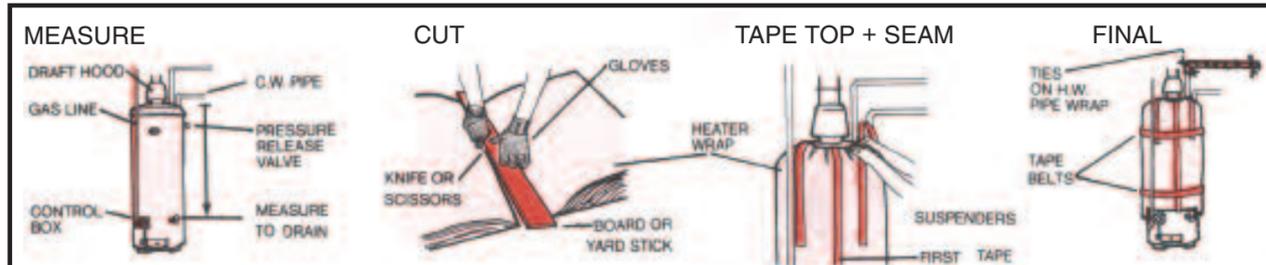


SELF-HELP ENERGY SAVING GUIDE



HOT WATER HEATER WRAP

Measure and Cut

- 1 Lay heater wrap on floor, fiberglass side down.
- 2 Measure tank from the top down to drain valve.
- 3 Measure jacket and cut extra off bottom. The top has a plastic flap.
- 4 Wrap strip cut from bottom of jacket around water heater. Cut it to fit exactly.
- 5 Using this strip as a guide, cut width of jacket.

Tape Jacket

- 6 Clean and dry top of tank
- 7 Wrap extra insulation jacket around water heater. Tape across seam at top, middle and bottom of jacket.
- 8 Tape plastic flap to top of tank.
- 9 Tape seam from top to bottom.
- 10 Use duct tape to make two "suspenders" which reach across top of tank and down six inches on each side.

PIPE WRAP

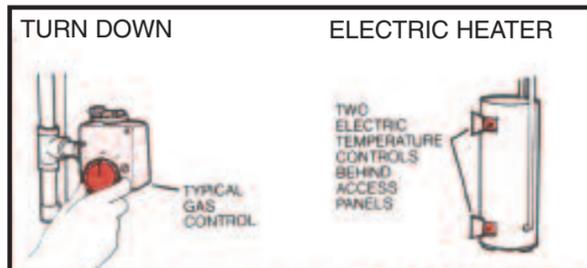
- 11 Tape a "belt" of duct tape all the way around water heater across ends of suspenders.
- 12 Put another belt of tape around jacket above control box.

Final Cuts

- 13 Cut jacket away from pressure relief valve, burner box, and controls.
- 14 If you have an electric water heater, cut open a flap for both access panels and cover top of heater with extra insulation.

Pipe Insulation

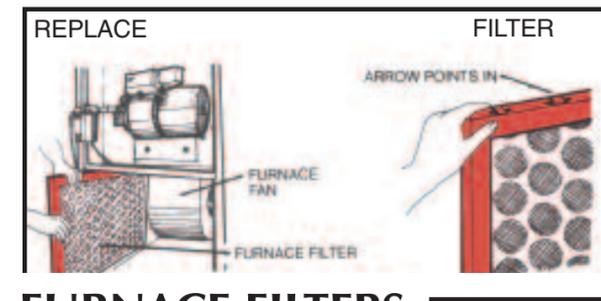
- 1 Starting above flue hood, twist pipe insulation onto hot water pipe. Don't leave any spaces.
- 2 Hold ends tightly in place with plastic ties or tape.



TEMPERATURE CONTROL

Water Heater Temperature Control

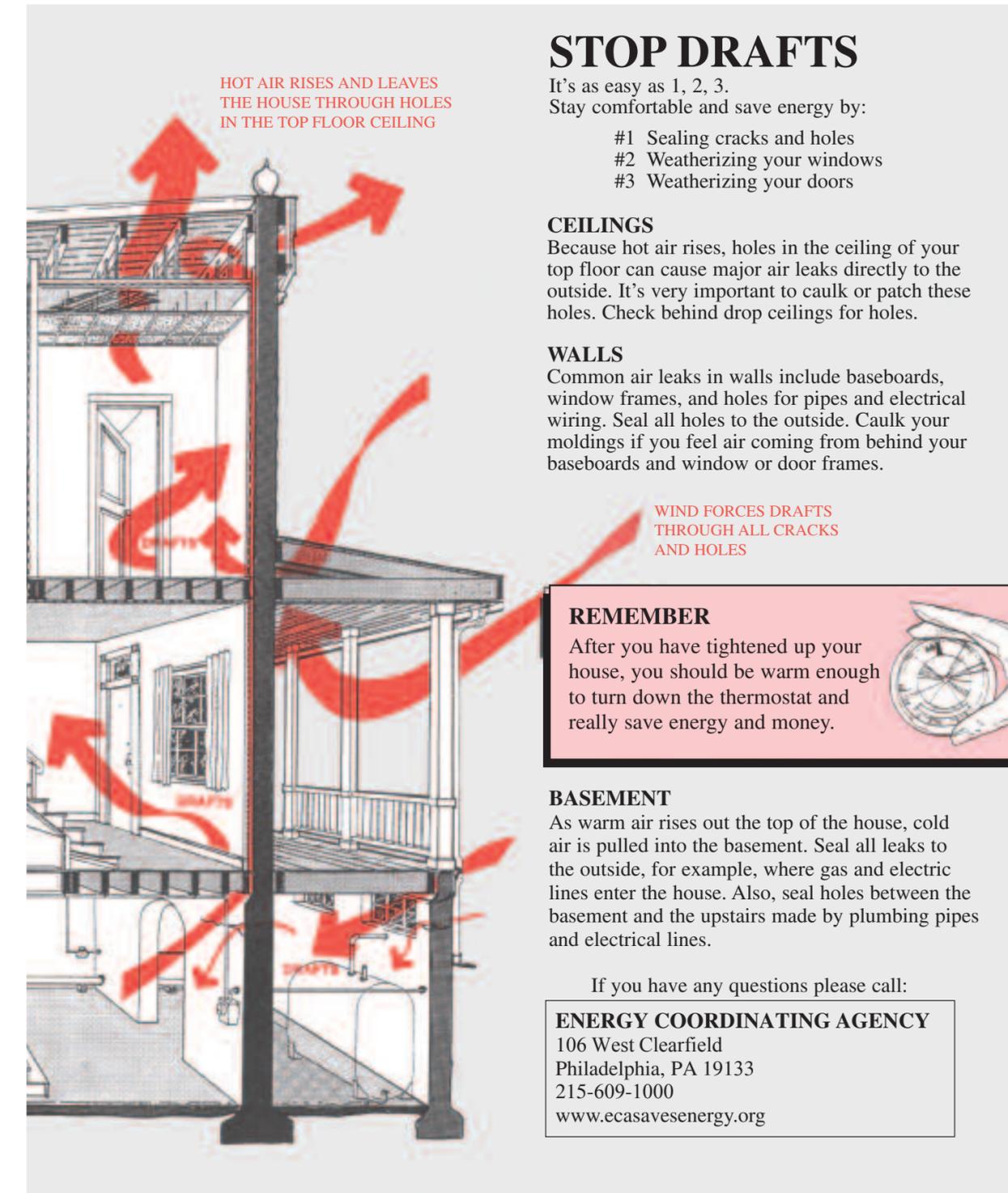
- 1 You should be able to use your hot water without adding cold water.
- 2 Turn temperature of your water heater down to warm (or low).
- 3 An electric water heater has two temperature controls. They are behind the access panels on front. To lower the temperature – turn off electricity, take off access panels and turn down both controls. The top control should be 5 degrees higher than bottom one. We suggest 125 degrees for top and 120 degrees for bottom.



FURNACE FILTERS

Furnace Filters

- If you have heating vents, you have a hot air furnace and a furnace filter. Filters should be kept clean.
- 1 Check filter every month.
 - 2 If filter is dirty, replace it with a new one the same size.
 - 3 Filters have arrows on the top side. Put new filter in with arrow pointing into furnace.
 - 4 If old filter is reusable, clean it and put it back.



STOP DRAFTS

It's as easy as 1, 2, 3.
Stay comfortable and save energy by:

- #1 Sealing cracks and holes
- #2 Weatherizing your windows
- #3 Weatherizing your doors

CEILING

Because hot air rises, holes in the ceiling of your top floor can cause major air leaks directly to the outside. It's very important to caulk or patch these holes. Check behind drop ceilings for holes.

WALLS

Common air leaks in walls include baseboards, window frames, and holes for pipes and electrical wiring. Seal all holes to the outside. Caulk your moldings if you feel air coming from behind your baseboards and window or door frames.

REMEMBER

After you have tightened up your house, you should be warm enough to turn down the thermostat and really save energy and money.



BASEMENT

As warm air rises out the top of the house, cold air is pulled into the basement. Seal all leaks to the outside, for example, where gas and electric lines enter the house. Also, seal holes between the basement and the upstairs made by plumbing pipes and electrical lines.

If you have any questions please call:

ENERGY COORDINATING AGENCY
106 West Clearfield
Philadelphia, PA 19133
215-609-1000
www.ecasavesenergy.org

1 CRACKS and HOLES

Every house has **CRACKS and HOLES** which let cold air in and hot air out. If you seal them up, your house will be less drafty and your heating bills much lower. Tube caulk is hard to remove. Use it for cracks that can be sealed forever. Rope caulk can be removed. Use it in winter around moving parts of your windows. Cover big holes with plastic or cardboard. Be creative, use anything that works.

2 WINDOWS

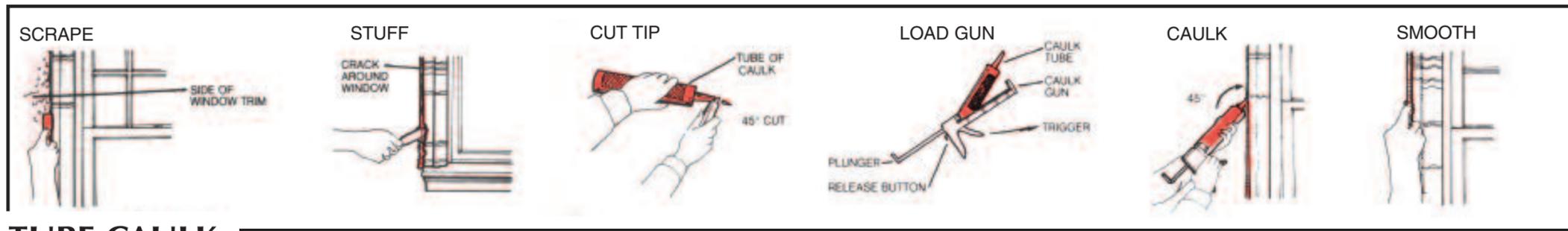
Make your **WINDOWS** work for you. In winter, close and lock all windows. Don't forget the storm windows. Seal cracked glass with clear tape. Replace broken glass. Use rope caulk and tube caulk to stop drafts. For your final layer of protection put up a plastic window kit.

Tips for zip-lock storm windows

- 1 Put frame strips on a smooth flat part of window frame.
- 2 The side of frame strip with "U" shape should be closest to window.
- 3 Make ends of all frame strips meet. Line up "U" shaped grooves.
- 4 Try not to use strips shorter than six inches.
- 5 Cut plastic sheet larger than opening between strips.

3 DOORS

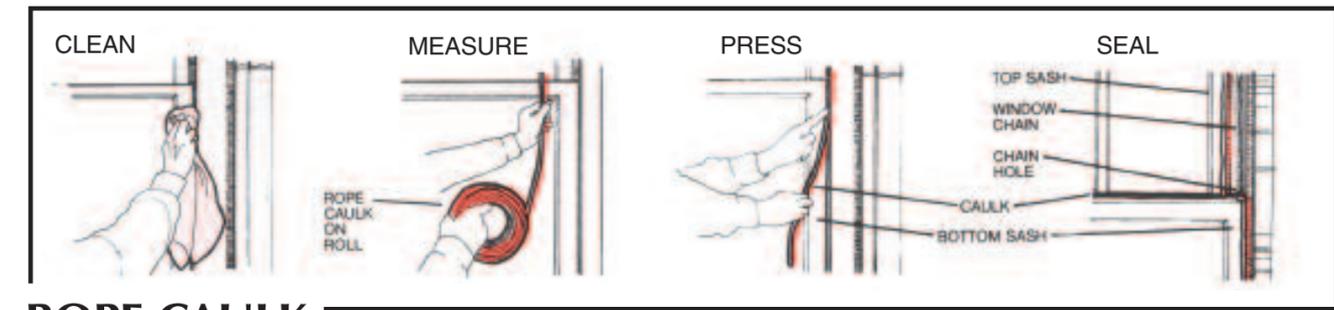
Beat the draft at your **DOORS** too! If you have an entryway, use it. Close the first door before you open the second. Check around door trim inside and out for cracks which need caulk. Use V-seal between sides and top of door and frame. Use a door sweep at the bottom.



TUBE CAULK

Tube Caulk seals inside: —along drafty baseboards—between walls and trim around windows and doors. Tube caulk seals outside: around window and door frames—between door sills and front steps. Caulk outside when it is dry and above 40 degrees. Do not use tube caulk on moving parts.

- 1 Remove loose caulk and dirt with scraper or wire brush.
- 2 If the crack is bigger than your little finger, stuff it with insulation or old rope caulk.
- 3 Cut tip of caulk tube on an angle.
- 4 Put tube in gun.
- 5 Hold caulk gun at a 45 degree angle. Squeeze trigger and slowly pull tip of tube along crack. Make sure caulk fills crack and overlaps a little on both sides.
- 6 Smooth caulk with a wet finger if necessary.

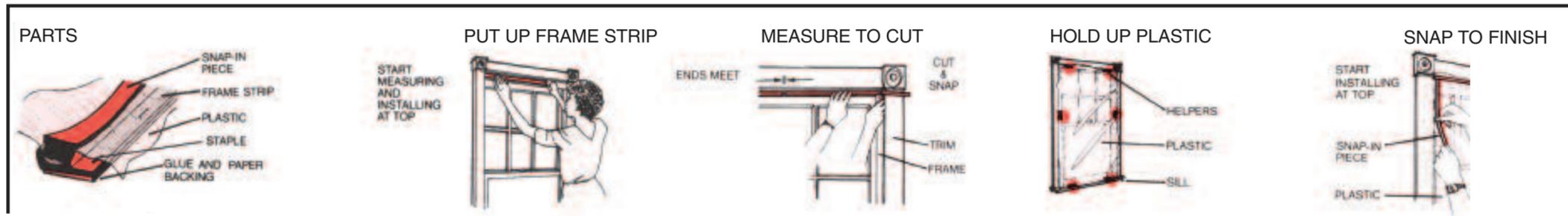


ROPE CAULK

Rope Caulk seals cracks around moving parts of window.

- 1 Clean and dry surface.
- 2 Tear off piece of rope caulk as long as crack to be sealed.
- 3 Press rope caulk firmly onto crack.

- 4 Seal all cracks around window. Don't forget cracks between top and bottom sashes.



ZIP-LOCK WINDOWS

Put up frame strips:

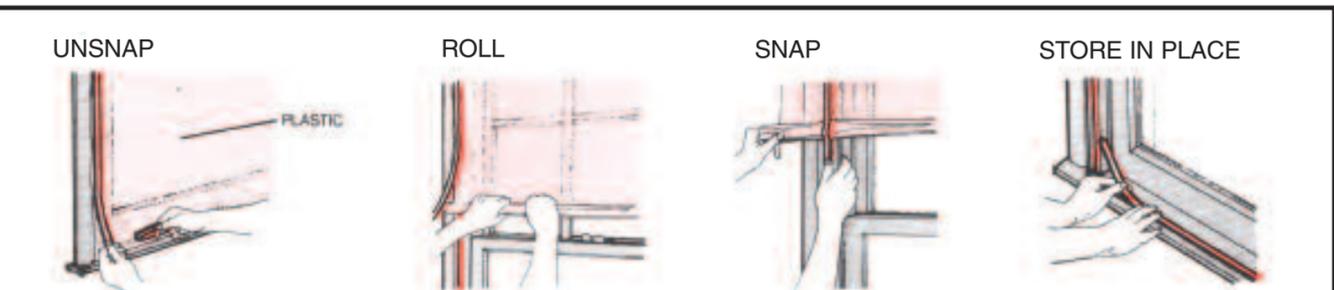
- 1 Remove loose paint. Clean and dry window frame.
- 2 Peel paper off back of one frame strip.
- 3 Start at top corner. Stick frame strip across top of window frame.
- 4 If needed, measure and cut another frame strip to finish top.
- 5 Measure, cut and stick frame strips on sides and bottom.
- 6 Staple or nail frame strips every six to eight inches if needed.

Put up plastic:

- 7 Cut six small pieces of snap-in strip. These pieces are your helpers.
- 8 Hold plastic sheet over frame strips. Leave three inches extra on top and on both sides.
- 9 Push in helpers at top corners.
- 10 Smooth plastic and push in helpers at bottom corners and in the middle of both sides.

Push in Snap-in pieces:

- 11 Push snap-in pieces into top frame strips. Take out helpers as you go.
- 12 Cut snap-in piece to fit exactly.
- 13 Push in side and bottom snap-in pieces. Smooth plastic as you go. If plastic is crooked or loose, pull out snap-in pieces and straighten.
- 14 Trim plastic. Leave two inches extra around window.



STORING ZIP-LOCK WINDOWS

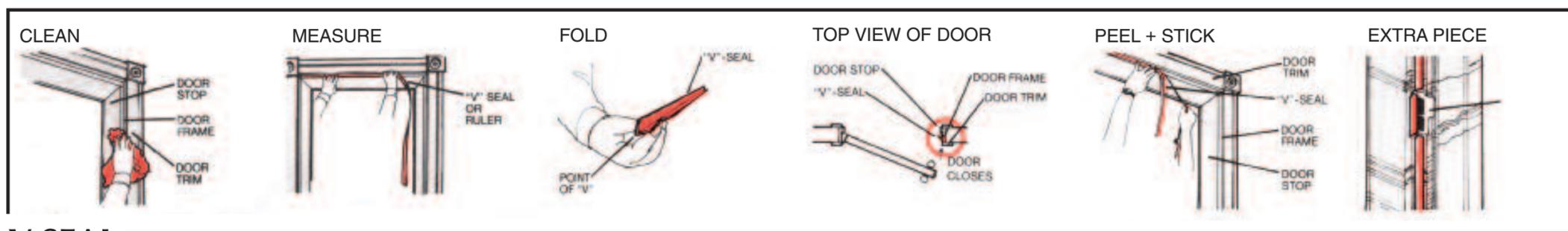
NEVER REMOVE FRAME STRIPS

Summer: Storing Zip-lock Windows:

- 1 Remove snap-in pieces and loosen side pieces to six inches from top of window.
- 2 Roll up plastic to where side pieces are still in place.
- 3 Hang each side snap-in piece over rolled plastic. Push side and bottom pieces back into frame strips.

Fall: Rolling Down Zip-lock Windows:

- 1 Fall: Loosen side snap-in pieces, roll down plastic and push pieces back into place. Check for tight seal.
- Repairing and Replacing Plastic Windows:**
Small tears in the sheet plastic can be fixed with tape. Replace worn out or lost plastic. Your plastic is a clear vinyl. Loose frame strips can be held with small nails or heavy duty staples. Frame strips and snap-in pieces can also be replaced.



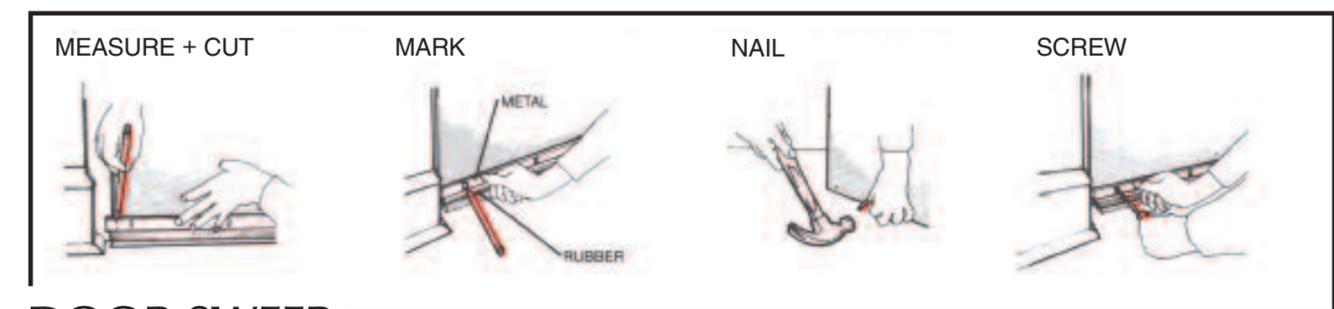
V-SEAL

Position **V-Seal** on doorframe between doorstep and trim. When door is shut, V-seal should fill gap.

- 1 Clean doorframe. Wipe with pure ammonia and dry.
- 2 Measure top of doorframe and cut a strip of V-seal to fit exactly.

- 3 Fold strip along centerline into a "V" shape. Paper backing should face out.
- 4 Stick strip onto frame with folded edge or point of "V" facing door. Peel paper off back as you go.

- 5 Measure, cut and put up V-seal on both sides of door frame.
- 6 On lock side, cut V-seal above and below latch plate. Put a small piece of V-seal behind latch plate.



DOOR SWEEP

Put **Door Sweep** on the inside if door opens inward.

- 1 Measure bottom of door. Cut sweep to size.
- 2 Put sweep against door so that rubber gently touches floor.

Mark bottom of each hole for screws.

- 3 Drill or nail at marks. Screw on sweep.
- 4 If door sweep is too high or too low, loosen screws, move sweep and rescrew.